

## REMARKS

### Status

Claims 51-55 are pending. Claims 1-54 were previously canceled.

### Claim Amendments

Applicants certify that no new matter under 35 U.S.C. §132 has been added by way of this amendment.

### Rejections under 35 U.S.C. §103

The Examiner has rejected claims 51-55 as being unpatentable under 35 U.S.C. 103(a) over Hasselbrink, Jr., *et al.*, (US 6,782,746 B1 "Hasselbrink") in view of Domeier, *et al.*, (US 6,422,528 "Domeier") with or without Rehm, *et al.*, (Micro Total Analysis Systems 2001, 227-229). Applicants respectfully traverse this rejection for the following reasons.

#### *No Prima Facie Case for Obviousness*

The Examiner's combination does not make a prima facie case for obviousness under 35 U.S.C. §103 because that combination does not contain each and every element of the claimed invention nor a motivation to combine with a reasonable expectation of success. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Applicants respectfully assert that the Examiner has again engaged in improper "hindsight" reconstruction of Applicants' claimed invention. The following arguments further support Applicants' assertion.

#### Hasselbrink/Domeier Combination Deficiencies

The claimed invention recites the addition of polymeric particles to a monomer solution to make polymer-polymer composite mobile monolithic elements.

Domeier do not teach or suggest adding a polymeric particulate to a monomer solution to

produce polymer-polymer composite flow control elements. Indeed, Domeier discloses the use of readily dissolvable polymeric materials for use as sacrificial molds for micromachining substrates. The Examiner contends that Domeier discloses suggests adding particulates to polymers (column 8, lines 30-35 of Domeier) to improve chemical stability of the claimed mobile elements; however, in reading past that passage reveals that “[A] feature important to sacrificial molds of this invention (Domeier) is their ability to be dissolved in appropriate solvents . . . .(Domeier column 8, lines 36-38.) Moreover, Domeier, taken as a whole, teaches using particulates so that the sacrificial micromolds of Domeier can be effectively dissolved when need be, contrary to the objectives of the claimed invention. Accordingly, Domeier teaches away from using particulates to improve solvent resistance of molded composite mobile elements used for fluid flow control. The Examiner’s combination of Hasselbrink and Domeier would result in composite polymeric mobile elements that readily dissolve in the presence of solvents contrary to the objectives of the claimed invention. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). Embracing the Ratti Court, Applicants respectfully request withdrawal of this rejection.

#### Hasselbrink/Domeier/Rehm Combination

The Examiner has attempted to make a prima facie case for obviousness under 35 U.S.C. §103 by combining the earlier combination of Hasselbrink and Domeier with Rehm. The Examiner’s combination does not meet the requirements under 35 U.S.C. §103 because Rehm discloses polymeric mobile elements without particulates therein and does not cure the deficiencies of the Hasselbrink/Domeier combination. Accordingly, Applicants respectfully request withdrawal of this rejection.

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Amdt. dated Jun 28, 2007  
Reply to Office Action of Mar 21, 2007

### CONCLUSION

For the foregoing reasons, Applicants believe the pending claims are now in condition for allowance. Accordingly, Applicants respectfully request a Notice of Allowance. If, in the Examiner's opinion, a telephone conference may be helpful, Applicants' counsel may be contacted at the number below.

Respectfully submitted  
under 37 C.F.R. 1.34(a),

  
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